## **CHAPTER 1**

## INTRODUCTION

#### 1.1 Background of the Study

In recent years, mobile-assisted language learning (MALL) applications have become a ground-breaking tool for second language acquisition, providing learners all over the world with previously unheard-of accessibility, flexibility, and interactivity. The near-ubiquity of smartphones and tablets, which facilitate ubiquitous and autonomous learning experiences, is a major factor driving this shift. Language learning can now transcend the limitations of traditional classroom settings (Kukulska-Hulme & Shield, 2008). By enabling users to seamlessly integrate language practice into their daily lives, these mobile devices enable learning at any time and from any location. This increases exposure frequency, which is crucial for language acquisition and retention (Stockwell, 2010).

With over 300 million users and gamified language learning for over 30 languages, including English as a foreign language (EFL), Duolingo stands out among the many MALL applications as a globally significant platform. Due to its extensive use, it offers a useful research avenue at the nexus of language pedagogy and educational technology (Vesselinov & Grego, 2012; Loewen et al., 2019). In line with well-established motivational theory, Duolingo's gamified approach uses leaderboards, badges, streaks, and instant feedback to increase learner engagement and persistence (Chen, Dörnyei, & Ryan, 2020; Deterding et al., 2011).

Multiple language skills are covered by Duolingo's interactive and self-directed lesson design, including vocabulary acquisition, grammar comprehension, reading comprehension, listening practice, and basic speaking exercises. For EFL learners who might not have access to extensive formal instruction, this multifaceted skill focus is especially important as it supports comprehensive language development (Stockwell & Hubbard, 2013). The platform facilitates cognitive processing and knowledge retention by delivering bite-sized, contextualised lessons that align with the microlearning paradigm of mobile learning (Huang et al., 2020).

Importantly, Duolingo and related apps serve students in underserved or isolated areas with limited access to traditional classroom materials and trained teachers. By enabling scalable access to high-quality learning resources, this democratisation of language instruction provides a workable solution to global educational disparities. Many students use mobile apps like

Duolingo to augment their formal education, which helps them expand their vocabulary and reinforce grammatical structures taught in school curricula, according to research by Hwang et al. (2023). In a similar vein, Pertiwi et al. (2023) point out that mobile applications are essential resources for sustaining motivation and ongoing language practice outside of formal contexts, filling in learning continuity gaps.

Thus, Duolingo's increasing impact and popularity are indicative of larger MALL trends in which technology enhances institutional instruction and supports self-directed learning paths. Its function in supporting blended learning settings, in which mobile applications enhance in-class instruction, is consistent with contemporary pedagogical models that support flexible and learner-centred teaching methods (Berk et al., 2018). This establishes Duolingo as both a language-learning aid and a subject for critical examination to ascertain how mobile technologies alter teaching approaches and language acquisition procedures in various contexts.

Studies on Mobile-Assisted Language Learning (MALL) tools typically place a greater emphasis on design and usability than on how these tools actually aid in language learning or the efficacy of instruction (Essafi & Belfakir, 2024). Therefore, it is essential for English language instructors to confirm whether students find popular apps like Duolingo enjoyable as well as whether they actually support quantifiable language development and educational objectives. According to Alshahrani et al. (2023), user feedback from learners is crucial for comprehending how mobile tools impact engagement, comprehension, retention, and eventually language development. This highlights the significance of assessing user-generated content for both developers and educators who want to successfully incorporate technology into their teaching practices.

According to this study, user reviews are a rich qualitative data source that can provide language teachers with tangible pedagogical insights despite being underutilised. In relation to important second language acquisition (SLA) domains like vocabulary practice, grammar clarity, and pronunciation training—or, on the other hand, the lack of these supports—these reviews highlight learners' attitudes, beliefs, and actions (Liu, 2012). The app's contribution to vocabulary acquisition, a fundamental linguistic component essential for language proficiency, is exemplified by comments that highlight Duolingo's vocabulary exercises (Nation, 2013). Hwang et al. (2023) provide additional evidence that digital platforms that improve spaced exposure and reinforcement have a positive effect on learner autonomy and vocabulary retention, two factors that are crucial in situations involving self-directed learning.

User reviews offer empirical proof that motivational design features like badges, streaks, and progress tracking actively maintain language learning engagement beyond language content (Chen, Dörnyei, & Ryan, 2020; Deterding et al., 2011). According to motivational theories, these gamified elements support learner persistence in both formal educational settings and self-directed contexts by providing instant feedback, goal-setting, and reward systems (Deci & Ryan, 1985; Dörnyei, 2009). These results are essential for English teachers who want to use gamification in the classroom or in blended learning environments to encourage long-term student engagement and motivation.

Furthermore, reviews frequently show that users use Duolingo as an adjunct to traditional education or in their free time, underscoring the usefulness of the app in blended or hybrid learning models (Berk et al., 2018). According to this blended usage, teachers can use user feedback to identify how mobile apps enhance curricula and facilitate language learning outside of the classroom, which can help them make pedagogical decisions for flexible learning pathways and differentiated instruction (Graham & Perin, 2007).

Teachers and curriculum designers can gain an authentic window into learner perspectives and unmet needs by methodically examining user-generated feedback. This allows for data-informed adaptation of teaching strategies and digital integration (Alshahrani et al., 2023). This learner-centred strategy improves the theoretical and applied connection between SLA principles and mobile learning tools guarantee that educational technology satisfies the affective and cognitive requirements necessary for successful English language acquisition.

All things considered, Duolingo's educational value goes far beyond the app's usability; user reviews offer practical information about learner motivation, vocabulary acquisition effectiveness, and extra teaching techniques that English language instructors can use. This alignment grounds MALL research in real-world learner experiences and instructional utility, bridging the gap between pedagogical theory and technological innovation and advancing the field of English language education.

English as a Foreign Language (EFL) students are among the many learners who find flexibility and gamification in mobile-assisted language learning (MALL) applications like Duolingo appealing (Kukulska-Hulme & Shield, 2008; Alshahrani et al., 2023). Even with this extensive use, there is still a significant conflict between the app's popularity and the uneven educational value that both users and teachers perceive (Zhang, Zhou, & Wang, 2023; Essafi & Belfakir, 2024). Although user engagement metrics, interface usability, and the motivational effects of gamification have been the subject of numerous quantitative studies (Chen, Dörnyei,

& Ryan, 2020; Deterding et al., 2011), these studies fall short in capturing the complex realities of learners' challenges, lived experiences, and perceived effectiveness of learning in naturalistic settings.

In particular, current research frequently ignores how students evaluate the breadth and quality of language learning beyond statistics and experiment-driven results, including vocabulary acquisition, grammatical comprehension, speaking practice, and integration with more general study habits (Kim, Jung, & Lee, 2023; Pertiwi et al., 2023). There is a significant knowledge gap regarding how MALL apps like Duolingo truly help or fail to facilitate English language acquisition and pedagogy from the learner's perspective because mentions of informal user feedback are typically anecdotal or secondary rather than methodically examined (Zhang, Zhou, & Wang, 2023).

The Uses and Gratifications Theory (UGT) (Katz, Blumler, & Gurevitch, 1974; Sundar & Limperos, 2013) is the theoretical framework used in this study to fill this gap. It views users as active agents who are trying to meet particular cognitive, affective, social, and entertainment needs. Although UGT has been extensively used in digital content and social media research, its use in examining learner reviews in second language instruction is still relatively new. This theory makes it possible for the study to look at not just what students do with Duolingo but also why they select and stick with it, shedding light on the underlying expectations, frustrations, and motivations that influence user engagement and language learning results.

Through a thematic analysis of 500 real user reviews from the Google Play Store, this study offers a strong qualitative understanding of how students perceive Duolingo's contribution to vocabulary development, motivation, and additional learning techniques. By putting students' voices front and centre, this strategy highlights the discrepancies between the app's enormous popularity and varying opinions about how effective it is as a teaching tool. These opinions include worries about the app's depth of content, ability to practise useful skills, and integration with traditional classroom instruction (Alshahrani et al., 2023; Liu, 2012). In order to better support pedagogical goals, English educators and curriculum developers must critically assess and modify mobile learning tools rather than depending only on engagement or design metrics that are highlighted in app development research. For this reason, this learner-focused perspective is extremely pertinent.

To sum up, this study closes a significant research gap in English language instruction by methodically and qualitatively analysing real user feedback as a prism to comprehend the real difficulties and achievements that students encounter when using MALL platforms, such as Duolingo. It emphasises how crucial it is to incorporate learner-centred assessments into app

assessments so that teachers can make evidence-based choices that improve both independent and blended learning settings.

#### 1.2 Research Questions

This study aims to address the following research questions:

- 1.2.1 How do Duolingo users portray their experiences with five core dimensions of the app—(a) Effectiveness of Language Learning, (b) User Interface and Design, (c) Content Quality and Variety, (d) Gamification and (e) Ads and In-App Purchases—in their Google Play Store reviews?
- 1.2.2 What common themes emerge in positive, negative, and mixed reviews regarding the app's features and functionalities?

### 1.3 Research Purpose

Examining user opinions about the Duolingo app as they appear in Google Play Store reviews is the aim of this study. The specific objectives of this study are to explore the range of user experiences with the app and to identify recurring themes in user feedback. This study aims to offer insights into user experiences by examining written evaluations. This information can help developers identify areas where the app should be improved and identify areas where it is strong (Liu, 2012; Duolingo Blog, 2024).

### 1.4 Research Gap

Research on user feedback based on real user reviews is scarce, despite Duolingo's increasing popularity. Although the research currently in publication has examined several topics related to mobile-assisted language learning (MALL), such as its efficacy and engagement tactics, a methodical examination of user-generated content is necessary to acquire a better understanding of users' experiences with the app (Anderies et al., 2023). By exploring themes and topics in user reviews submitted on the Google Play Store, this study seeks to close this gap.

User feedback is crucial to understanding how educational technology applications satisfy the needs of learners. Liu (2012), for example, highlights that user evaluations are a valuable source of qualitative information that can provide insights into what consumers value about an app and what needs to be improved. This study's emphasis on user-generated content will help us better understand how users view Duolingo, especially in terms of how useful it is as a language-learning tool. Additionally, it is difficult to make thorough judgments regarding user experiences and app performance in particular contexts due to the dearth of systematic reviews (Essafi & Belfakir, 2024). Thus, the emphasis on user reviews in this study will yield

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insightful information that can advise developers on any updates or improvements that are required to better the user experience.

Prior research has emphasized the significance of comprehending user experiences since it has a direct bearing on retention rates and sustained use of educational programs (Alshahrani et al., 2023). According to research, users are more likely to continue using and recommending an application to others when they are happy with it (Berk et al., 2018). This emphasizes how important it is for developers to listen carefully to user input to provide a supportive learning environment. To give the Duolingo development team useful information, this study aims to explore user sentiments of positive, negative and mixed by methodically examining reviews from the Google Play Store.

Examining user reviews enables the discovery of recurring themes to assess the efficacy of MALL applications. Qualitative insights from user input might provide a more complex understanding of the experiences of learners. By offering a thorough examination of user reviews on Duolingo, this study seeks to close that gap and advance the field of MALL research.

Ultimately, by concentrating on user feedback obtained from real reviews of the Duolingo app, this study fills a major vacuum in the literature. This study offers important insights into user experiences and recurring topics in feedback by methodically examining these evaluations. The results will not only help us better understand how Duolingo caters to the demands of its wide range of users, but they will also be useful to developers who want to improve their apps based on user feedback.

### 1.5 Scope of the Study

Only user reviews of the Duolingo app, which is accessible through the Google Play Store, will be the subject of this study. All pertinent reviews will be included in the analysis, enabling a thorough grasp of the user experiences in the many languages the app supports. To ensure that the results are unique to Duolingo, the study will not examine other language-learning platforms or applications. The study intends to offer focused insights that can directly inform stakeholders and developers about user experiences and opportunities for improvement by focusing only on this application.

A rich dataset reflecting a range of user experiences and viewpoints can be obtained by concentrating on user reviews from the Google Play Store. With millions of people regularly using Duolingo, there is a significant amount of feedback accessible for analysis. A more nuanced view of user experiences, as well as common themes that may emerge across various populations and language learners, is made possible by this vast pool of data. Zhang et al.'s

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research from 2023 highlights the importance of thoroughly examining user review data since it can uncover trends that help developers understand customer preferences and wants.

Also, restricting the study to Duolingo guarantees that comparisons with other language-learning programs, which could differ in terms of features, user bases, and pedagogical strategies, will not dilute the results. Focusing on a single application enables a more nuanced understanding of how particular features and design components affect user experiences, as a study by Kim et al. (2023) emphasizes the significance of context when evaluating educational technology. This targeted strategy will make it possible to pinpoint the distinctive features of Duolingo that contribute to its user base's appeal.

To gain insight into how various user groups perceive the app's efficacy, this study will also consider reviews from a range of demographics and language learners. According to Lee et al. (2022), optimizing educational technology apps requires an awareness of users' varied demands and preferences. Through the analysis of user feedback from users with different backgrounds and language skill levels, this study can provide recommendations that are specifically designed to improve the learning experience for all users.

As a result, the scope of this study has been purposefully limited to offering a thorough examination of user reviews for the Duolingo app on the Google Play Store. It seeks to provide precise insights into user experiences and recurring topics in feedback by concentrating only on one application. In addition to improving our knowledge of Duolingo's efficacy as a language-learning tool, the results will be a useful tool for developers looking to improve their apps based on actual user experiences.

# 1.6 Research Significance

There are various reasons why this study is important. First, it offers insightful information about how users interact with the Duolingo app, which can help developers identify areas that need to be improved (Pertiwi et al., 2023). Second, by highlighting user experiences and expectations through the identification of common themes in user evaluations, this research advances the field of mobile-assisted language learning (Anderies et al., 2023). Lastly, knowing user experiences can help educators and legislators decide how best to incorporate technology into language learning programs.

Additionally, by using Uses and Gratifications Theory to analyze Duolingo user reviews, this study advances the theoretical understanding of user behaviour in MALL. This study can help design and develop more user-centred and efficient language learning tools by pinpointing the precise requirements and rewards that users look for in the app.

#### 1.7 Clarification of Key Terms

- 1.7.1 Mobile-Assisted Language Learning (MALL): Mobile-Assisted Language Learning (MALL) refers to the use of mobile devices, such as smartphones and tablets, to facilitate language learning through applications, tools, or platforms. In this study, MALL specifically pertains to the Duolingo application, which is designed to assist users in learning languages through gamified features and interactive exercises. Duolingo serves as an example of MALL by providing accessible, mobile-based language-learning opportunities that align with the study's focus.
- 1.7.2 User reviews: User reviews are user-submitted comments or feedback about their experiences with an application or service. In this study, user reviews refer to comments posted by Duolingo users on the Google Play Store. These reviews provide insights into users' satisfaction levels, recurring themes in their feedback, and their perceptions of Duolingo's features and functionalities. The analysis of these reviews forms the core dataset for this research.
- 1.7.3 Sentiment analysis: Sentiment analysis is a method used to determine whether a text expresses a positive, negative, or neutral sentiment. In this study, sentiment analysis is applied to Duolingo user reviews to categorize their sentiments and gain deeper insights into overall user satisfaction levels. By identifying sentiment patterns in user feedback, this method helps reveal how users perceive Duolingo's strengths and weaknesses, contributing to the thematic analysis and answering the research questions.

# 1.8 Organization of the Paper

This thesis is structured into five chapters. Following this introduction, Chapter 2 presents a thorough literature review on apps for mobile-assisted language learning, with an emphasis on user experiences and review processes. Chapter 3 details the research method used in this study, including the steps involved in data collection and analysis. Chapter 4 presents the results and analysis of user comments from Google Play Store reviews of the Duolingo app. Finally, Chapter 5 discusses the findings' implications and offers suggestions for further research.